

REMARKS

Claims 1-4, 8, 12, and 14-17 have been amended. New dependent claim 32 has been added. Claims 1-4, 8-12, 14-17, 20-21 and 32 are pending in the application. Reexamination and reconsideration are respectfully requested.

Applicants' counsel wishes to thank the Examiner for the courtesies extended during the personal interview on July 7, 2010. The following records the substance of the interview.

Prior Art Rejections

Claims 1-4, 8-10 and 20-21 were rejected under 35 U.S.C. § 103(a) as being obvious over Nakano et al. (EP 1 134 674) in view of Ogaki et al. (US 2002/0059024). Further, claims 11-12 were rejected as being obvious over Nakano et al. in view of Ogaki et al. and further in view of Wilson et al. (US 6,985,929). Finally, claims 14-17 were rejected as being obvious over Nakano et al. in view of Narahara (US 2002/0007367).

As discussed in the interview, Applicants respectfully traverse these rejections in view of the following remarks and claim amendments. In that regard, Applicants incorporate herein their prior remarks submitted with the Reply dated January 7, 2010.

Amendments to Independent Claims 1, 8 and 14

As suggested by the Examiner during the interview, Applicants have amended independent claims 1 and 14 to specify that divided map-related information (for example, a set of mesh data 182 in Fig. 4) includes basic data (for example, 112 in Fig. 4) and extension data (for example, 114 in Fig. 4). As recited in amended claim 1, the basic data is “available at all levels,” corresponding to one of a plurality of different scaling factors at which the map is rendered, while the extension data is “available at one or more specific levels but not all levels.” The basic data and the extension data being provided separately from each other. The basic data is used to display the map at a display device, and the extension data contains information used in route search.

Per claim 14, the divided map-related information corresponding to each of the units is also separated into basic data and extension data to be individually managed. The basic data has a “higher priority than the extension data.” The basic data is “prepared in order not to exceed a predetermined upper data size limit.” A processing unit executes processing of the map data by using the divided map-related information where the basic data is prepared in order not to exceed the predetermined upper data size limit.

Regarding Applicants’ independent claim 8, because this claimed invention is directed toward the processing of the map data by using two-dimensional coordinate values at a given level to which is attached two-

dimensional coordinate values of a connecting point at a level at which the map is rendered in greater detail, Applicants have specified that the map-related information comprises “data used in route search.” Applicants have also added a dependent claim 32 specifying that the divided map-related information corresponding to each of the units comprises basic data available at all levels and extension data available at one or more specific levels but not all levels.

Independent Claim 1

Applicants’ independent claim 1 recites a map data processing apparatus including, *inter alia*, a processing unit that updates map-related information recorded in a recording medium by using update data obtained by an update data acquisition unit and management information. A plurality of levels is defined, each in correspondence to one of a plurality of different scaling factors at which the map is rendered. A plurality of sets of the map-related information is provided in correspondence to the plurality of levels. Applicants have clarified claim 1 to specify that the map is divided into a plurality of divisions at each level, and each of the plurality of sets of map-related information, corresponding to a given level, is divided into units corresponding to the plurality of divisions into which the map is divided. The divided map-related information corresponding to each of the units comprises basic data available at all levels and extension data available at one or more specific levels but not all levels. The

basic data and the extension data are provided separately from each other. The basic data is used to display the map at a display device, and the extension data contains information used in route search.

In contrast and as discussed during the interview, the passage of Nakano cited in the Office Action relating to Figure 33 makes clear that Nakano does not disclose basic data available at all levels and extension data available at one or more specific levels but not all levels, wherein the basic data is used to display the map at a display device and the extension data contains information used in route search. Indeed, Nakano only discloses “figure 33 is a diagram *showing the concept* of the route search operation” in paragraph [0139] (emphasis added). That is, Figure 33 is not an actual display at a display device, but rather a representative diagram illustrating conceptually a route search operation.

Because Nakano fails to disclose or suggest the above features of claim 1 as discussed during the interview, Applicants submit claim 1 is patentable over Nakano. Further, claims 2-4 and 20-21 depend from claim 1 and are also submitted to be patentable. In that regard, dependent claims 2-4 have been amended for definiteness in light of the clarifying amendments made to claim 1.

Hence, claims 1-4 and 20-21 are patentable over Nakano, whether taken alone or in combination with Ogaki.

Independent Claim 8

Applicants have amended claim 8 to recite a map data processing apparatus that includes, *inter alia*, a recording medium drive unit that receives a recording medium where are recorded map data including a structure having map-related information, and a structure having management information for the map-related information. The map-related information comprises data used in route search. The map is divided into a plurality of divisions at each level, and each of the plurality of sets of map-related information, corresponding to a given level, is divided into units corresponding to the plurality of divisions into which the map is divided. A connection point, at which the map-related information corresponding to one of two divisions is correlated to the map-related information corresponding to the other division, is present at a geographically matching position within the two divisions. The two divisions belong to levels different from each other. Two-dimensional coordinate values of the connecting point at a given level further contain two-dimensional coordinate values of a connection point at a level at which the map is rendered in greater detail than the given level. The processing unit executes processing of the map data by using the two-dimensional coordinate values of the connecting point.

In contrast and as discussed during the interview, the Office Action's reliance on Ogaki for allegedly disclosing the two-dimensional coordinate values of the connecting point at a given level further containing two-dimensional

coordinate values of a connecting point at a level at which the map is rendered in greater detail than the given level, is incorrect. Indeed, Ogaki merely discloses the naming of a map file name (see ¶¶ [0127] – [0134]) and the naming of a floor map file name (see ¶ [0164]). Ogaki does not disclose how to define “two-dimensional coordinate values of the connecting point” as in Applicants’ invention.

Because Ogaki does not disclose or suggest the use of “two-dimensional coordinate values of a connecting point at a level at which the map is rendered in greater detail than the given level,” it is not possible for Ogaki to render obvious Applicants’ claimed invention wherein “two-dimensional coordinate values of the connecting point at a given level further contain two-dimensional coordinate values of the connecting point at a level at which the map is rendered in greater detail than the given level.”

In view of the above, Applicants respectfully submit claim 8 is patentable over Nakano in view of Ogaki. Further, claims 9-12 depend from claim 8 and are also patentable over Nakano in view of Ogaki.

Finally, Applicants have added new dependent claim 32, which depends from claim 8, and further specifies that the divided map-related information corresponding to each of the units comprises basic data available at all levels and extension data available at one or more specific levels but not all levels. The

basic data is used to display the map at a display device, and the extension data contains the data used in route search.

In view of the patentability of claim 8, as well as the patentability of claim 1 containing this feature, Applicants respectfully submit new dependent claim 32 is also patentable over Nakano in view of Ogaki.

Independent Claim 14

Claim 14 recites a map data processing apparatus including, *inter alia*, a processing unit that updates map-related information by using update data and management information. The map-related information is divided into units corresponding to a plurality of divisions into which the map is divided. The divided map-related information corresponding to each of the units is separated into basic data and extension data to be individually managed. The basic data has a higher priority than the extension data. The basic data is prepared in order not to exceed a predetermined upper data size limit. The processing unit executes processing of the map data by using the divided map-related information where the basic data is prepared in order not to exceed the predetermined upper data size limit.

In contrast and as discussed during the interview, the assertion in the Office Action that Narahara discloses the feature of the basic data prepared in

order not to exceed a predetermined upper data size limit is incorrect. The passage recited in the Office Action, i.e.

[0109], only references “a size reduction process to reduce a size of a selected element” in Narahara’s system. Narahara’s system, however is not at all related to a map data processing apparatus that allows for system updates, but rather just a device or system for processing document information (see ¶ [0002]). Even then, Narahara does not disclose that its size reduction process is performed to reduce a size of a selected element having higher priority than another element.

Indeed, it is not at all apparent as to how one skilled in the art would utilize the teachings of Narahara in combination with Nakano in order to arrive at Applicants’ invention. Even selective picking and choosing based on hindsight does not render a map data processing apparatus as recited in claim 14.

In view of the foregoing, Applicants submit amended claim 14 is patentable over Nakano in view of Narahara. Further, claims 15-17 depend from claim 14 and recite further features not disclosed or suggested by the art of record. Hence, Applicants submit claims 14-17 are now in condition for allowance.


In view of the foregoing, Applicants submit all pending claims are now in condition for allowance. An early notice to the effect is solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 029267.55611US.

Respectfully submitted,

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